

on the site of the ancient chapel of ease to Althorp, which fell last year.—Messrs. Warden, of New Holland, and Spendlar, of Barrow, have contracted to erect a building at New Hlland for a school and place of worship, designed by Mr. Bake, architect, in the Gothic style, and sixty feet long by thirty wide, at a cost of 500*l.*, of which upwards of 100*l.* are still unsubscribed. There has been a sudden influx of a large population at this place in consequence of its becoming a terminus of the Manchester, Sheffield, and Lincolnshire Railway.—The price of gas at Grimsby is to be reduced from 7*s.* 6*d.* to 6*s.* 8*d.*—Some substantial repairs, according to the *Cambridge Chronicle*, have been made at Botolph Claydon Church, more especially in the tower and western porch.—The committee for repair of St. Michael's Church, Cambridge, are appealing to the public for means to meet the expenses of several of the works already noticed by us, which were not included in the first contract, but were found requisite to the safety, solidity, and utility of the edifice.—A large new organ has been built in Kirkstall Church, by Messrs. Forster and Andrews, of Hull. The instrument has three rows of keys, and a separate pedal organ. It contains thirty-seven stops, besides four composition pedals. Altogether there are 1,614 pipes in the organ, with room to add to their number if necessary.—We should like to consult with the sticklers for high rates on gaslight according to expenses of coals on the following case complained of by a correspondent. At Hitchin, Herts, when coals cost 20*s.* to 28*s.* a ton, the price of gas was 6*s.* a thousand cubic feet, heaides 5*s.* a year for use of meter. Now that coal can be had by the Great Northern Railway at 15*s.* a ton, the price of gas remains the same as ever, although, *ex hypo*, it ought to be reduced by not much less than half the amount. Are the company really gainers, in an enlightened sense of self-interest, by refusing to reduce their price? We do not believe it, whatever they may imagine their clear gain to be on such a mere difference in the expense of coal. The calculation is doubtless a penny-wise pound-foolish one, as the inhabitants of Hitchin would very soon let them see, of a long winter's evening, were the company to tempt them with a fair opportunity.—Lord P. Fitzclarence is still engaged in improving Southsea Common, on which he is said to have expended at least 1,000*l.* exclusive of the cost of the esplanade which was chiefly defrayed by public subscription.—A new church has been erected at Deal and was to be consecrated on Wednesday last.—Carisbrook Castle, according to a Hampshire paper, is going fast to decay chiefly from neglect. The chapel roof has been blown off, and the rain is rotting all the interior fittings. Other parts of the castle are crumbling away without any thing being done to prevent the destruction of the whole.—The foundation-stone of the Worcester Diocesan Training School, at Sallitry, was laid on Thursday week before last. The building is in the Decorated style of architecture, and has already made some progress. The form will be quadrangular, of two stories, and the material is Hamstead stone, with Bath stone dressings. There will be 150 dormitories in the establishment, with all other appurtenances, and the cost is estimated at about 10,000*l.* Mr. Benjamin Ferrey is the architect, and Mr. H. C. Holland the builder.—In consequence of high prices and a monopoly of fittings by the Cardiff Gas Company, a new company has been projected.—A new church and new schools are being built at Aberdare, near Merthyr, and a site for a second new church has just been selected on Mr. Clive's estate.—The works at the Duke of Beaufort's dock, Swansea, and at the float, have so far progressed as to enable the masons to proceed with the quay walls in the former, and with portions of the lock in the latter. The Swansea Water Works Company, in order to meet the growing wants of the town, have just commenced the erection of a second reservoir.—The Royal Institution at Liverpool have agreed to the transfer of their valuables to the proposed public library and museum there.—On Wednesday week the Bishop of Manchester consecrated the new church of St. Paul's, Ramsbottom, which has been built by subscription, and is in the early English style, cost 2,500*l.*

and will accommodate 600 people. The architects are Messrs. Holden, of Manchester.—The shopkeepers in Fargate, says the *Sheffield Times*, have prevailed on the board of surveyors to take up the Welsh sets with which that street was paved, and substitute the large blocks of gritstone more generally in use in this town. The reason is the same that influenced the shopkeepers in Market-street to oppose the introduction of Welsh sets in their locality—namely, that they occasion an intolerably loud noise when horses and vehicles are passing over them. Any one who has watched the experiment of the Welsh sets in Fargate—for they are of recent introduction in Sheffield—will be prepared to admit that the noise was at times quite formidable, but parties conversant with the subject say it was because, from a want of experience in setting them, the stones were placed too far apart, and consequently there was too much vibration. In Manchester, where the traffic is immense, these loud-sounding stones are in general use, and the noise is certainly not deemed intolerable; but that is to some extent explained by the fact that in Manchester the streets are much wider than in this town. In two others of our streets, Spring-street and Love-lane—the Welsh sets are in use, and no one complains of them. The first cost of Welsh sets, delivered in Sheffield, is 16*s.* a ton. This is slightly in excess of the cost of gritstone, but it is computed that the latter will not wear more than one-sixth of the time of the Welsh stones. We have heard it stated that a further objection to the Welsh pavement is its slipperiness.—The body of Irthlington church has been rebuilt. Efforts are now being made for the repair of the chancel.—"Mr. Simpson, of Heighington, formerly assistant to Mr. Bonomi," says the *Gateshead Observer*, "has contracted for the maintenance of our county bridges for ten years."

#### RAILWAY BRIDGE, HIGH-STREET, LEAMINGTON.

RELATIVE to the large bridge which is now being erected over the High-street, Leamington, mentioned in your journal of Sept. 26, I beg to hand you a short description, which will enable those who are desirous of investigating its constructive principles more clearly to comprehend them.

The bridge here spoken of forms a portion of a viaduct, about 29 chains in length, and commencing a short distance beyond Althorpe-street, passing over the site lately occupied by the Royal Hotel; thence and over that on which stood Curtis's Baths, terminating in Orchard-street. In consequence of the meeting of the roads, the railway takes a diagonal course with reference to them, and has to span a considerable width.

To give a general idea of the structure, I must state that the clear bearing of the bridge is 137 feet; that each side is composed of three double tiers of American oak wallings, halved together, 14 inches by 7 inches, and seated on the abutments in iron shoes; between these longitudinal bearers is framed flat lattice-work, in scantlings, 9½ by 7; chamfered externally between lower and central wallings, and lined internally with 1½ inch ploughed, tongued, and beaded boarding; these lattice-work scantlings cross at right-angles, are let into each other 2 inches alternately, and bolted at each intersection: the wallings are also let into them 2 inches, and bolted, so that the sides form a series of trusses, not unlike the sides of the large suspension aqueduct which carries the canal over the Alleghany River, at Pittsburgh, in America. Between the central and top wallings wrought and chamfered vertical posts are framed, at distances of about 10 feet, and the space between them externally lined with beaded boarding, the same as before mentioned: a moulded iron gutter and wood valance are to be affixed to the eaves. The flooring is supported upon iron transverse girders, bolted to the oak wallings: these girders are cast with pockets in them, and carry wrought and chamfered bearers, 12 inches by 7, on which are spiked 3-inch planking, laid diagonally. The roof has cast-iron open-arched girders, and is covered with galvanized tinned iron, laid on wrought and beaded boarding. The raised part is to be glazed with rough plate-glass, and the upright

space between the iron and glass covered portion is to be occupied by an ornamental cast-iron louver, for the purposes of ventilation. As a support for each extremity of the bridge a tower is erected of brick, and cased with Derbyshire and Temple Girding stones.

In conclusion, allow me to add that I am disposed to regard the term tubular-bridge as a misnomer; it may, I think, very properly be denominated a lattice-bridge, and I beg to recommend it to the notice of those who have never seen a similar description of structure; it is worthy of inspection, and will well repay a trip. THOS. E. KNIGHTLEY.

#### WORKS AND FAILURES AT LONDON-BRIDGE RAILWAY STATION.

THE question of the safety of the remaining iron girders over Joiner-street has been referred to two leading engineers, we believe, but we have not heard their report. There are six girders in all: the one that broke is the fifth from Tooley-street. The fracture is nearly close to the abutment.

An arcade is being constructed on the left hand side of the approach to the terminus. It will be similar to the Lowther Arcade in the Strand, with shops, and a large refreshment-room in the centre of the thoroughfare which fronts the terminus. The building, between 100 and 200 feet in length, has its basement in Tooley-street, whence it rises about 60 feet, divided into three stories, the upper elevation forming the arcade on a level with the railway, and the lower part in Tooley-street forming a range of ordinary shops. The front is to be in the Italian style, and the building is to be completed and opened by Christmas. A large number of workmen are now engaged with the station-works at this terminus, which it is said will become one of the largest in England. The station consists of a large covered-in platform, between 700 and 800 feet in length. The truss principals supporting the roof seem nearly 100 feet span. There will be waiting-rooms, booking-offices, managers' and secretaries' departments.

We have received the following letter:—

"The South-Eastern Railway Company appears to revel in ill-constructed work. This afternoon (Oct. 29th), about half-past three, the whole of the scaffolding crossing the road leading to the terminus of the North Kent and Greenwich station fell with a loud crash. It consisted of a temporary wooden bridge, erected for the purpose of conveying materials now being used in adding another story to the joint station. Thousands of persons have been passing under this daily, and a large number of men were at work on the premises at the time of the accident, but providentially no person was hurt. There was no particular pressure upon this portion of the scaffolding when it fell. "SOUTHWALL."

#### NEW NORTHERN SCHOOLS, ST. MARTIN'S-IN-THE-FIELDS.

THE new schools in Castle-street, Long Acre, near Mr. Hullah's music-hall, which were opened, as we said, on the 17th of October, form a large and important building, and will accommodate 800 children. We gave an exterior view of the building in our last volume (p. 451), and our readers will remember that the style is Italian-Gothic, designed by Mr. Wild: it is executed in brickwork—in some parts cut and rubbed, in others moulded for the purpose. The front, by the way, is an excellent piece of work, very creditable to the contractors, Messrs. Haward and Nixon. On the ground-floor there is a school-room 53 feet 9 inches, by 24 feet 6 inches, and 16 feet 4 inches high, with living rooms for masters. On the one pair story is the principal schoolroom, 97 feet long, and of the same height and width as that below. On the top a covered play-ground is formed: whether it will be found desirable to retain it, however, as such, seems to us doubtful. The roof is very light, partly wood, partly iron, and is tied down by upright rods of iron against the walls, to timbers in the floor below, to prevent any possible accident from the action of the wind. To the Rev. Henry Mackenzie, the vicar, the main credit is due for having obtained this important increase of school accommodation. There is a debt owing of about 2,700*l.*, which it is to be hoped some